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PTO/SB/05 (4/98)
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c598 Attorney Docket No.

## UTILITY PATENT APPLICATION

12-0887 First Inventor or Application Identifier Hanna H-S. Hsu

POLYPHASE FILTER WITH STACK SHIFT CAPABILITY

TRANSMITTAL
nonprovisional applications under 37 C.F.R. § 1.53(b))

Express Mail Label No. EJ789028369US

APPLICATION ELEMENTS  See MPEP chapter 600 concerning utility patient application contents.  ADDRESS TO: Box Patient Application Washington Concerning Utility patient application contents.  ADDRESS TO: Box Patient Application Washington DG: 2021  I. X   Fee Transmittal Form (e.g., PTO/SB/17)   Submit an original and a duplicate for fee processing)  Corporation of the Invention   Descriptive tills of the Invention   Descriptive tills of the Invention   Descriptive tills of the Invention   Description of the Drawings (if filed)   Description of the Drawings (if filed)   Detailed Description   Detailed Description		12370702030705			
Specification   Total Pages   4   1   1   1   1   1   1   1   1   1		ADDRESS TO: Box Patent Application			
For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.  17. CORRESPONDENCE ADDRESS  Or Correspondence address below    Correspondence address below	1. X * Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original and a duplicate for fee processing)  2. X Specification [Total Pages 14]    - Descriptive title of the Invention - Cross References to Related Applications - Statement Regarding Fed sponsored R & D - Reference to Microfiche Appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (if filed) - Detailed Description - Claim(s) - Abstract of the Disclosure  3. X Drawing(s) (35 U.S.C. 113) [Total Sheets 6] ]  4. Oath or Declaration [Total Pages 3] ]  a. X Newly executed (original or copy) b. Copy from a prior application (37 C.F.R. § 1.63((for continuation/divisional with Box 16 completed)  i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application see 37 C.F.R. §§ 1.63(d)(2) and 1.33(b).  **NOTE FOR ITEMS 1-& 13 IN ORDER TO BE ENTITLED TO PAY SMALL ENTITY FREES, A SMALL ENTITY STATEMENT IS REQUIRED (37 C.F.R. § 1.27), EXCEPT IF ONE FILED IN A PRIOR APPLICATION, check appropriate box, and so Continuation Divisional Continuation-in-part (4)	5. Microfiche Computer Program (Appendix) 6. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. Computer Readable Copy b. Paper Copy (identical to computer copy) c. Statement verifying identity of above copies  ACCOMPANYING APPLICATION PARTS  7. X Assignment Papers (cover sheet & document(s)) 8. X 37 C.F.R.§3.73(b) Statement X Power of (when there is an assignee) 9. English Translation Document (if applicable) 10. X Statement (IDS)/PTO-1449 X Copies of IDS Statement (IDS)/PTO-1449 X Citations 11. Preliminary Amendment 12. X Return Receipt Postcard (MPEP 503) (Should be specifically itemized) 13. Statement(s) Statement filed in prior application Status still proper and desired (PTO/SB/09-12) (if foreign priority is claimed) 15. Other:			
Customer Number or Bar Code Label   Customer No. or Attach bar code label here)   Or	under Box 4b, is considered a part of the disclosure of the accompan	ying continuation or divisional application and is hereby incorporated by has been inadvertently omitted from the submitted application parts.			
Patent Counsel   TRW Inc.   Law Dept.   One Space Park, Bldg. E2/6072					
TRW Inc.  Law Dept.  One Space Park, Bldg. E2/6072  City Redondo Beach State CA Zip Code 90278  Country U.S.A. Telephone (310) 812-4910 Fax (310) 812-2687	☐ Customer Number or Bar Code Labe I or ☑ Correspondence address below				
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Country U.S.A. Telephone (310) 812-4910 Fax (310) 812-2687	One Space Park, Bldg. E2/6072				
Name (Print/Type) Michael S. Yatsko Registration No. (Attorney/Agent) 28,135	Country U.S.A. Telephone	(310) 812-4910   Fax (310) 812-2687			
Signature Muly S Gutto Date 11/2 4/99	W 1 1 C C A				

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FEE TRANSMITTAL		Complete if Known		
ILL INANSMITTAL	Application Number	Unassigned		
for FY 1999	g	Filing Date	November 24, 1999	
Patent fees are subject to annual revision. Small Entity payments <u>must</u> be supported by a small entity statement, otherwise large entity fees must be paid. See Forms PTO/SB/09-12.	First Named Inventor	Hanna H-S. Hsu		
	Examiner Name	Unassigned		
I		Group / Art Unit	N/A	
TOTAL AMOUNT OF PAYMENT (\$) 878.00	Attorney Docket No.	12-0887		

METHOD OF PAYMENT (check one)	FEE CALCULATION (continued)					
The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:  Deposit  Deposit	3. ADDITIONAL FEES Large Entity Small Entity Fee Fee Fee Fee Code (\$) Code (\$)	Fee Paid				
Account  20-1515	105 130 205 65 Surcharge-late filing fee or oath	0.00				
Number Deposit Account TRW Inc.	127 50 227 25 Surcharge-late provisional filing fee or cover sheet.	0.00				
Name Charge Any Additional	139 130 139 130 Non-English specification	0.00				
— Fee Required Under	147 2,520 147 2,520 For filing a request for reexamination	0.00				
37 CFR 1.16 and 1.17	112 920* 112 920* Requesting publication of SIR prior to	0.00				
2. Payment Enclosed: Check Money Other	113 1,840° 113 1,840° Requesting publication of SIR after Examiner action	0.00				
FEE CALCULATION	115 110 215 55 Extension for reply within first month	0.00				
	116 380 216 190 Extension for reply within second month	0.00				
1. BASIC FILING FEE Large Entity Small Entity	117 870 217 435 Extension for reply within third month	0.00				
Fee Fee Fee Fee Fee Description Fee Paid	118 1,360 218 680 Extension for reply within fourth month	0.00				
Code (\$) Code (\$) 101 760 201 380 Utility filing fee 750 00	128 1,850 228 925 Extension for reply within fifth month	0.00				
106 310 206 155 Design filing fee 760.00	119 300 219 150 Notice of Appeal	0.00				
107 480 207 240 Plantfiling fee	120 300 220 150 Filing a brief in support of an appeal	0.00				
108 760 208 380 Reissue filing fee	121 260 221 130 Request for oral hearing	0.00				
114 150 214 75 Provisional filing fee	138 1,510 138 1,510 Petition to institute a public use proceeding	0.00				
	140 110 240 55 Petition to revive - unavoidable	0.00				
subtotal (1) (\$) 760.00	141 1,210 241 605 Petition to revive - unintentional	0.00				
2. EXTRA CLAIM FEES Fee from	142 1,210 242 605 Utility issue fee (or reissue)	0.00				
Extra Claims <u>below</u> <u>Fee Paid</u>	143 430 243 215 Design issue fee	0.00				
Total Claims 9 -20** = 0	144 580 244 290 Plantissuefee	0.00				
Claims	122 130 122 130 Petitions to the Commissioner	0.00				
Multiple Dependent = 0.00	123 50 123 50 Petitions related to provisional applications	0.00				
**or number previously paid, if greater; For Reissues, see below Large Entity Small Entity	126 240 126 240 Submission of Information Disclosure Stmt	0.00				
Fee Fee Fee Fee Description	581 40 581 40 Recording each patent assignment per	1				
Code (\$) Code (\$) 103 18 203 9 Claims in excess of 20	property (times number of properties)  146 760 246 380 Filing a submission after final rejection	40.00				
102 78 202 39 Independent claims in excess of 3	(37 CFR 1.129(a))	0.00				
104 260 204 130 Multiple dependent claim, if not paid	149 760 249 380 Foreach additional invention to be examined (37 CFR 1.129(b))					
109 78 209 39 **Reissue indenpendent claims	examined (3) Of N 1.123(D))	0.00				
over original patent	Other fee (specify)	0.00				
110 18 210 9 **Reissue claims in excess of 20 and over original patent	Other fee (specify)	0.00				
SUBTOTAL (2) (\$) 78.00	*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.0	00				
SUBMITTED BY Complete (if applicable)						
Typed or Printed Name Michael S. Yatsko,	Reg. Number 28,13					
Signature Muhul S. Yulia	Date 11/24/94 Deposit Account User ID 2,165					